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(FILE 'REGISTRY' ENTERED AT 13:55:38 ON 23 JUL 2005)

L3 STR  
L4 50 SEA SSS SAM L3  
D SCAN  
L5 28025 SEA SSS FUL L3  
L6 STR L3  
L7 4 SEA SUB=L5 SSS FUL L6

FILE 'HCAPLUS' ENTERED AT 14:00:02 ON 23 JUL 2005

L8 1 SEA ABB=ON PLU=ON L7  
D STAT QUE L8  
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FILE 'REGISTRY' ENTERED AT 14:00:49 ON 23 JUL 2005

L14 STR  
L15 10 SEA SUB=L5 SSS FUL L14  
L16 8 SEA ABB=ON PLU=ON L15 NOT L7

FILE 'HCAPLUS' ENTERED AT 14:05:33 ON 23 JUL 2005

L17 14 SEA ABB=ON PLU=ON L16  
L18 13 SEA ABB=ON PLU=ON L17 NOT L8  
D STAT QUE  
D IBIB ABS HITSTR L18 1-13

FILE HCAPLUS

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FILE COVERS 1907 - 23 Jul 2005 VOL 143 ISS 5  
FILE LAST UPDATED: 22 Jul 2005 (20050722/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 22 JUL 2005 HIGHEST RN 856698-04-9  
DICTIONARY FILE UPDATES: 22 JUL 2005 HIGHEST RN 856698-04-9

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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

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\*  
 \* The CA roles and document type information have been removed from \*  
 \* the IDE default display format and the ED field has been added, \*  
 \* effective March 20, 2005. A new display format, IDERL, is now \*  
 \* available and contains the CA role and document type information. \*  
 \*

\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

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=> fil hcaplus

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FILE COVERS 1907 - 23 Jul 2005 VOL 143 ISS 5  
 FILE LAST UPDATED: 22 Jul 2005 (20050722/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

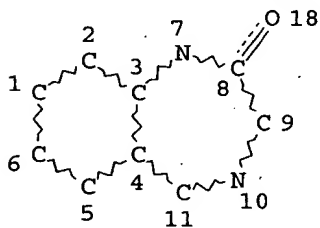
This file contains CAS Registry Numbers for easy and accurate substance identification.

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L3 STR



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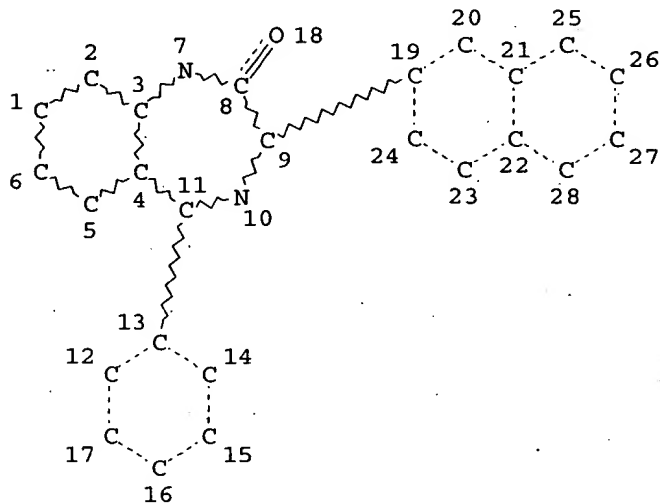
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L5 28025 SEA FILE=REGISTRY SSS FUL L3  
L6 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE

L7 4 SEA FILE=REGISTRY SUB=L5 SSS FUL L6  
L8 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L7

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=> d ibib abs hitstr l8 1

L8 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:154190 HCAPLUS

DOCUMENT NUMBER: 138:180767

TITLE: Compositions and methods relating to novel benzodiazepine compounds and targets thereof

INVENTOR(S): Glick, Gary D.; Oipari, Anthony W.

PATENT ASSIGNEE(S): The Regents of the University of Michigan, USA

SOURCE: PCT Int. Appl., 123 pp.

CODEN: PIXXD2

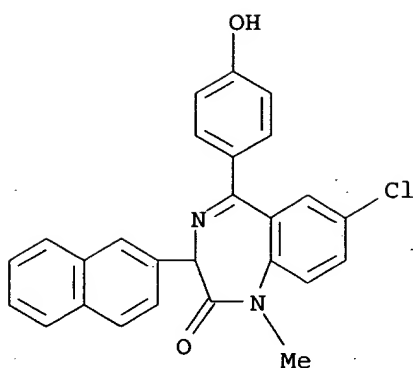
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 8

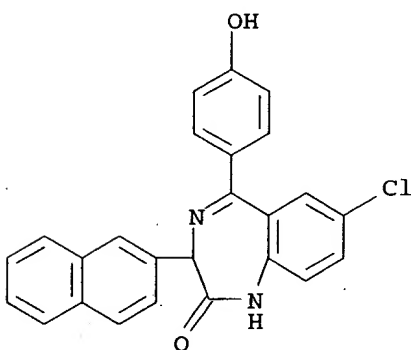
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003015703	A2	20030227	WO 2002-US26171	20020815
WO 2003015703	A3	20031113		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003119029	A1	20030626	US 2002-217878	20020813
CA 2457405	AA	20030227	CA 2002-2457405	20020815
EP 1423122	A2	20040602	EP 2002-794914	20020815
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2005502652	T2	20050127	JP 2003-520664	20020815
PRIORITY APPLN. INFO.:				
			US 2001-312560P	P 20010815
			US 2001-313689P	P 20010820
			US 2002-396670P	P 20020718
			US 2002-217878	A 20020813
			US 1999-131761P	P 19990430
			US 1999-165511P	P 19991115
			US 2000-191855P	P 20000324
			WO 2000-US11599	W 20000427
			US 2000-700101	A1 20001108
			US 2001-767283	A2 20010122
			WO 2002-US26171	W 20020815
AB	The invention relates to novel chemical compds., methods for their discovery, and their therapeutic use. In particular, the invention provides benzodiazepine derivs. and methods of using benzodiazepine derivs. as therapeutic agents to treat a number of conditions associated with the faulty regulation of the processes of programmed cell death, autoimmunity, inflammation, and hyperproliferation, and the like.			
IT	498557-61-2 498557-68-9 498557-75-8 498557-82-7 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (compns. and methods relating to novel benzodiazepine compds. and targets thereof)			
RN	498557-61-2 HCAPLUS			
CN	2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-3-(2-naphthalenyl)- (9CI) (CA INDEX NAME)			



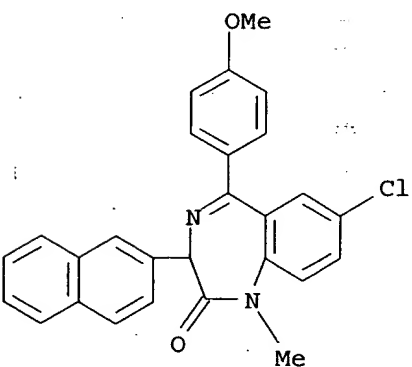
RN 498557-68-9 HCAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



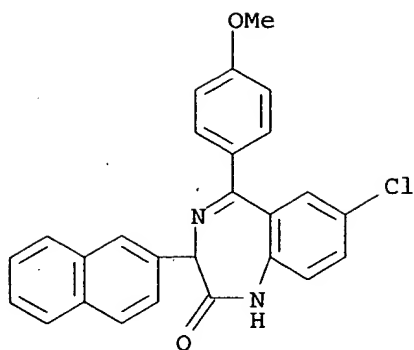
RN 498557-75-8 HCAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-methoxyphenyl)-1-methyl-3-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 498557-82-7 HCAPLUS

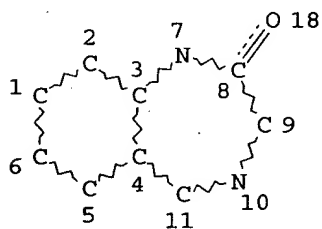
CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-methoxyphenyl)-3-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



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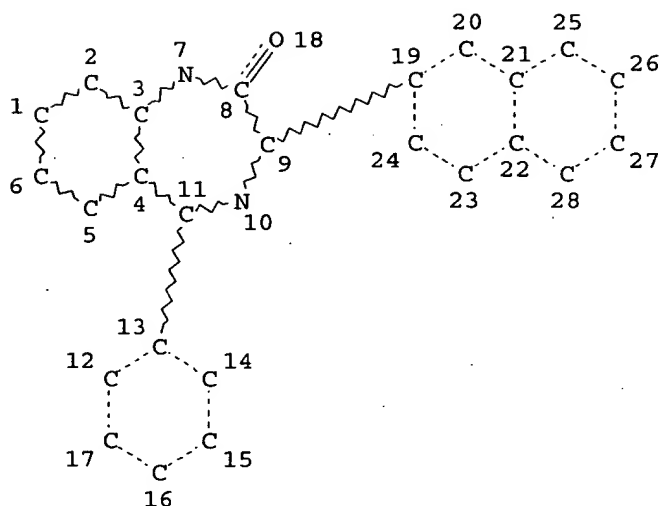
L3 STR



NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE  
 L5 28025 SEA FILE=REGISTRY SSS FUL L3  
 L6 STR

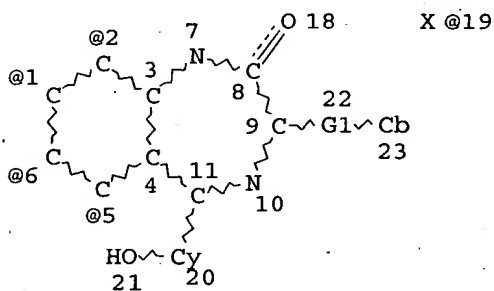


NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE

L7 4 SEA FILE=REGISTRY SUB=L5 SSS FUL L6  
 L8 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L7.  
 L14 STR



REP G1=(0-10) C  
 VPA 19-1/2/5/6 U  
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 DEFAULT MLEVEL IS ATOM  
 GGCAT IS PCY AT 23  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

L15 10 SEA FILE=REGISTRY SUB=L5 SSS FUL L14  
 L16 8 SEA FILE=REGISTRY ABB=ON PLU=ON L15 NOT L7  
 L17 14 SEA FILE=HCAPLUS ABB=ON PLU=ON L16

L18 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L17 NOT L8

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=&gt; d ibib abs hitstr l18 1-13

L18 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:356175 HCAPLUS

DOCUMENT NUMBER: 143:71310

TITLE: Identification and Validation of the Mitochondrial  
F1F0-ATPase as the Molecular Target of the  
Immunomodulatory Benzodiazepine Bz-423AUTHOR(S): Johnson, Kathryn M.; Chen, Xueni; Boitano, Anthony;  
Swenson, Lara; Pipari, Anthony W.; Glick, Gary D.CORPORATE SOURCE: Department of Chemistry, University of Michigan, Ann  
Arbor, MI, 48109, USASOURCE: Chemistry & Biology (2005), 12(4), 485-496  
CODEN: CBOLE2; ISSN: 1074-5521

PUBLISHER: Cell Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Summary: Bz-423 is a 1,4-benzodiazepine that suppresses disease in lupus-prone mice by selectively killing pathogenic lymphocytes, and it is less toxic compared to current lupus drugs. Cells exposed to Bz-423 rapidly generate O2- within mitochondria, and this reactive oxygen species is the signal initiating apoptosis. Phage display screening revealed that Bz-423 binds to the oligomycin sensitivity conferring protein (OSCP) component of the mitochondrial F1F0-ATPase. Bz-423 inhibited the F1F0-ATPase in vitro, and reconstitution expts. demonstrated that inhibition was mediated by the OSCP. This target was further validated by generating cells with reduced OSCP expression using RNA interference and studying the sensitivity of these cells to Bz-423. Our findings help explain the efficacy and selectivity of Bz-423 for autoimmune lymphocytes and highlight the OSCP as a target to guide the development of novel lupus therapeutics.

IT 216691-95-1, Bz-423

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(identification and validation of mitochondrial F1F0-ATPase as the mol.  
target of immunomodulatory benzodiazepine Bz-423)

RN 216691-95-1 HCAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-3-(2-naphthalenylmethyl)- (9CI) (CA INDEX NAME)